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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/530,167	04/24/2000	CLAUS GODER	GK-GEY-1065	2203

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REED SMITH, LLP
ATTN: PATENT RECORDS DEPARTMENT
599 LEXINGTON AVENUE, 29TH FLOOR
NEW YORK, NY 10022-7650

EXAMINER

FARAH, AHMED M

ART UNIT PAPER NUMBER

3739

DATE MAILED: 02/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/530,167	Applicant(s) GODER ET AL.	
	Examiner Ahmed M Farah	Art Unit 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 22-38 and 43-45 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 22-30, 35-38, 43 and 44 is/are rejected.
- 7) ☒ Claim(s) 31-34 and 45 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/27/04; 12/8/04</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321[©] may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal

disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 22-25 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,537,270 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are directed to analogous devices for shaping the surface of an object with a laser beam, the devices comprising pulsed laser sources; a beam deflector; and micro-optically active structures that shape the intensity distribution of the laser beams after passing through.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 22-28, 30, 35, 38, 43, and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by James et al. U.S. Patent No. 5,463,200.

As to claims 22, 35, and 43, James et al (James, hereafter) disclose a system and methods of use for micro-machining a workpiece by optical energy, the system comprising:

- an Nd:YAG pulsed laser source **10** for providing pulsed laser beams **12**;

- a deflecting device **26A** through which the laser beam is guided over the surface of the object (see Fig. 14 and column 7 line 1 to column 8, line 4); and

- an optical device **14** provided for changing the distribution of the radiation intensity inside the laser beam cross-section (see Fig. 1), the optical device having at least one optical element with micro-optically active structure **16** (microlense), said micro-optically active structure having a diffractively active element structured in the micrometer range whose dimensions approximately correspond to the wavelength of the pulsed laser beams as presently claimed (see column 4, lines 35-40; column 5, lines 42-62; and equations 1 and 2).

As to claims 23 and 28, James discloses the use of various microlenses (micro-optically active structures).

Hence, the optical elements can be introduced into or removed from the laser beam path as presently claimed (see column 4, lines 50-55; and Figs. 2 and 18). James further discloses at least one optical element 22 with diffractive or refractive micro-optically active structure, which is suitable for influencing the intensity distribution in the laser radiation cross-section (see Figs. 1 and 11; and column 4, line 56 to column 5, line 7).

As to claims 24-27, 30, and 38, the micro-optical elements of James generate various beam intensity distributions, including Gaussian or bell-shaped intensity distributions (see column 5, lines 20-27; and column 8, lines 14--43). And, as to claim 44, he teaches that the material removal is carried out with micro-optically active structures having a vertical profile (see Fig. 18 column 5, lines 31-33).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was

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made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 29, 36, and 37 are rejected under 35 U.S.C.

103(a) as being unpatentable over James in view of Telfair et al. U.S. Patent No. 4,911,711.

Although James, described above, teaches the use of computer controlled optical element 26A, he fails to teach that said optical element is mounted on rotatable wheel as presently claimed. As to claims 36 and 37, he does not teach the method steps in which the surface is smoothed out.

However, Telfair et al. teach an alternative device for shaping objects by removing material from the surface of the object, the device comprising a laser source and an optical element mounted on a rotatable exchange wheel to scan the laser beams over the surface of the material being reshaped (see Fig. 2). Therefore, it would have been obvious to one skilled in the art at the time of the applicant's invention to modify James in view of Telfair et al. and use a rotatable wheel as an alternative scanning mechanism in order to scan the optical energy (laser beams) so as to remove material from the surface of the object being reshaped. It would have been further obvious to one skilled in the art to start the removal with a laser beam

having small spot area so as to concentrate high energy/intensity onto the surface, and use larger beam with lesser intensity/energy to smooth out the reshaped surface.

Allowable Subject Matter

4. Claims 31-34 and 45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

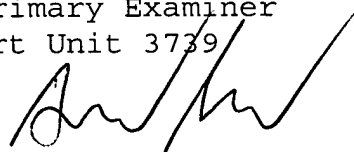
Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ahmed M Farah whose telephone number is (571) 272-4765. The examiner can normally be reached on Mon-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M DVorak can be reached on (571) 272-4768. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ahmed M Farah
Primary Examiner
Art Unit 3739



February 7, 2005